Mental stress quantification using fuzzy analysis of ECG parameters is presented here. ECG signal is decomposed using the BIOR-3.9 wavelet family up to three levels. The approximate signals are used for computation of ECG parameters like energy, entropy, power, standard deviation, mean and covariance. A fuzzy classifier is designed using trimf function as associate membership in fuzzy analysis. The ECG data base is taken from MIT data base web site.

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Index Terms

Computer Science
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ECG, BIOR-3.9 wavelet, Entropy, Energy, Power, Standard Deviation, Covariance
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